ABSTRACT OF THE DISCLOSURE

Novel 4-1BB ligand (4-1BB-L) polypeptides and a human cell surface receptor designated 4-1BB that binds 4-1BB-L are provided. Isolated 4-1BB-L-encoding and human 4-1BB-encoding DNA sequences, recombinant expression vectors comprising the isolated DNA sequences, and host cells transformed with the recombinant expression vectors are disclosed, along with methods for producing the novel polypeptides by cultivating such transformed host cells. Soluble forms of the 4-1BB-L or 4-1BB polypeptides are derived from the extracellular domains thereof.